### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018527 Address: 333 Burma Road **Date Inspected:** 05-Dec-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Li Yang **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG** Segment

**Summary of Items Observed:** 

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. M. Manikandan was present during the time noted above for observations relative to the work being performed.

OBG # TRIAL ASSEMBLY YARD (11DW-11EW)

This QA Inspector along with QA Inspector Mr. Manjunath S Math performed dimensional joint survey inspection on the B1, B2, B3, B4, T1 and T2 work point across transverse splice joints to verify the skin flatness using 5 meter string line, 600mm and 630mm straight edge. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11DW to Segment 11EW – PP 106 to PP 107

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD (11EE-12AE)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 011 in the (4G) overhead position on side and bottom panel piece mark no. SEG3001A. The location was the complete joint penetration groove weld joining side and bottom panel of segment 11EE at work point E4. The welder ID was 067765. The welding variables recorded by QC appeared to comply with the WPS-B-P-2214-B-U2-FCM-1. For additional information please reference the pictures below:

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#### OBG # TRIAL ASSEMBLY YARD (11EE)

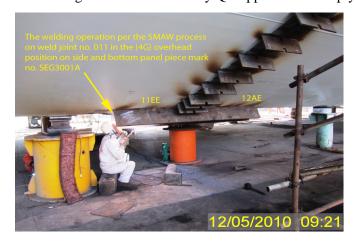
The QA Inspector observed the welding operation per the FCAW process on weld joint no. 021 in the (2F) horizontal position on side panel 'I' stiffener piece mark no. SP705-001. The location was the hold back of 'I' stiffener fillet weld of segment 11EE. The welder ID was 040367. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-ESAB.

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 030 in the (2F) horizontal position on side panel 'I' stiffener piece mark no. SP710-001. The location was the hold back of 'I' stiffener fillet weld of segment 11EE. The welder ID was 050289. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2112-FCM-1.

#### OBG # TRIAL ASSEMBLY YARD (12AE)

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 083 in the (2F) horizontal position on side panel 'I' stiffener piece mark no. SP3001-001. The location was the hold back of 'I' stiffener fillet weld of segment 12AE. The welder ID was 040367. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2132-ESAB.

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 033 in the (2F) horizontal position on side panel 'I' stiffener piece mark no. SP3016-001. The location was the hold back of 'I' stiffener fillet weld of segment 12AE. The welder ID was 050289. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2112-FCM-1.



#### **Summary of Conversations:**

No relevant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Quality Assurance Inspector Manikandan, Murugan **Reviewed By:** Peterson,Art QA Reviewer